

RESERVOIR SEDIMENTATION  
DATA SUMMARY

Hiwassee Lake

NAME OF RESERVOIR

45-9

DATA SHEET NO.

DAM	1. OWNER Guthrie, Okla Club			2. RIVER Unnamed trib. of Deep Fork Creek			3. STATE Oklahoma				
	4. SEC. 33 TWP. 14N RANGE 1 W			5. NEAREST TOWN Arcadia			6. COUNTY Oklahoma				
	7. STREAM BED ELEV.			8. TOP OF DAM ELEV.			9. SPILLWAY CREST ELEV.				
RESERVOIR	10. STORAGE ALLOCATION	11. ELEVATION TOP OF POOL	12. SURFACE AREA ACRES		13. STORAGE ACRE- FEET		14. ACCUMULATED ACRE- FEET		15. DATE STORAGE BEGAN		
	a. FLOOD CONTROL								1936		
	b. POWER										
	c. WATER SUPPLY										
	d. IRRIGATION								16. DATE NORMAL OPER. BEGAN		
	e. CONSERVATION		185		2341		2341		1936		
	f. INACTIVE										
17. LENGTH OF RESERVOIR 1.0 MILES			AV. WIDTH OF RESERVOIR 0.3 MILES								
WATERSHED	18. TOTAL DRAINAGE AREA 4.58 SQ. MI.			22. MEAN ANNUAL PRECIPITATION 32.26 (55) INCHES							
	19. NET SEDIMENT CONTRIBUTING AREA 4.29 SQ. MI.			23. MEAN ANNUAL RUNOFF INCHES							
	20. LENGTH 3.3 MILES			AV. WIDTH 1.4 MILES			24. MEAN ANNUAL RUNOFF AC.- FT.				
	21. MAX. ELEV.			MIN. ELEV.			25. CLIMATIC CLASSIFICATION Humid				
SURVEY DATA	26. DATE OF SURVEY	27. PERIOD YEARS	28. ACCL. YEARS	29. TYPE OF SURVEY	30. NO. OF RANGES OR CONTOUR INT.	31. SURFACE AREA ACRES		32. CAPACITY ACRE- FEET		33. C/W RATIO AC.- FT. PER SQ. MI.	
	1936 April 1950	- 14	- 14	- Range Recon.	- 6	185 185		2341 2158		511 471	
	26. DATE OF SURVEY	34. PERIOD ANNUAL PRECIPITATION		35. PERIOD WATER INFLOW ACRE- FEET			36. WATER INFL. TO DATE AC.- FT.				
		a. MEAN ANNUAL		b. MAX. ANNUAL		c. PERIOD TOTAL		d. MEAN ANNUAL		e. TOTAL TO DATE	
	26. DATE OF SURVEY	37. PERIOD SEDIMENT DEPOSITS ACRE- FEET			38. TOTAL SED. DEPOSITS TO DATE ACRE- FEET.						
		a. PERIOD TOTAL		b. AV. ANNUAL	c. PER SQ. MI.- YEAR		d. TOTAL TO DATE	e. AV. ANNUAL		f. PER SQ. MI.- YEAR	
	April 1950	183		13.07	3.05		183	13.07		3.05	
	26. DATE OF SURVEY	39. AV. DRY WGT. LBS. PER CU. FT.		40. SED. DEP. TONS PER SQ. MI.- YR.		41. STORAGE LOSS PCT.		42. SED. INFLOW PPM			
		a. PERIOD		b. TOTAL TO DATE		a. AV. ANNUAL		b. TOT. TO DATE		c. PERIOD	
April 1950					0.56		7.82				

6. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET ABOVE, AND BELOW, CREST ELEVATION												
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION												

26. DATE OF SURVEY	44. REACH DESIGNATION PERCENT OF TOTAL ORIGINAL LENGTH OF RESERVOIR														
	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	-105	-110	-115	-120	-125
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN REACH DESIGNATION														

45. RANGE IN RESERVOIR OPERATION							
WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW AC.-FT.	WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW AC.-FT.

46. ELEVATION-AREA-CAPACITY DATA								
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY

47. REMARKS AND REFERENCES  
 Reference: Reconnaissance investigation of Sedimentation in Hiwassee Lake, Renfro and Ogle, Mimeo., 1950.  
  
 The sediment is dominantly a light brownish red color. It consists of a fine sandy to silty clay.

48. AGENCY SUPPLYING DATA Region 4, Soil Conservation Service 49. DATE March 1951

U. S. Dept. of Agriculture  
 Fort Worth, Texas